

| Project Title  | Funding  | Strategic Plan Objective | Institution   |
|--|----------|--------------------------|---|
| Using near-infrared spectroscopy to measure the neural correlates of social and emotional development in infants at risk for autism spectrum disorder                        | \$0      | Q1.L.A                   | City of New York, College of Staten Island          |
| Abnormal connectivity in autism  | \$0      | Q2.Other                 | University of California, Los Angeles               |
| Role of Serotonin Signaling during Neural Circuitry Formation in Autism Spectrum Disorders   | \$0      | Q2.S.D                   | Massachusetts Institute of Technology               |
| Modeling Pitt-Hopkins Syndrome, an Autism Spectrum Disorder, in Transgenic Mice Harboring a Pathogenic Dominant Negative Mutation in TCF4                                    | \$0      | Q2.S.D                   | University of North Carolina                        |
| Multimodal Characterization of the Brain Phenotype in Children with Duplication of the 7q11.23 Williams Syndrome Chromosomal Region: A Well-defined Genetic Model for Autism | \$0      | Q2.S.G                   | National Institutes of Health                       |
| Enhancing Social Learning Through Oxytocin Augmentation of Social Skills Groups in Children with ASD   | \$0      | Q4.L.D                   | Rush University                                     |
| Whole Brain Mapping of the Effects of Intranasal Oxytocin in CNTNAP2 KO Mouse Model of Autism  | \$0      | Q4.Other                 | Cold Spring Harbor Laboratory                       |
| Characterization of synaptic and neural circuitry dysfunction underlying ASD-like behaviors using a novel genetic mouse model  | \$0      | Q4.S.B                   | Duke University                                     |
| Pinpointing Genes Underlying Autism in Chromosomal Region 16p11.2  | \$1,250  | Q4.S.B                   | Cold Spring Harbor Laboratory                       |
| TSC/mTOR Signaling in Adult Hippocampal Neurogenesis: Impact on Treatment and Behavioral Models of Autism Spectrum Disorders in Mice   | \$7,769  | Q2.Other                 | University of California, Los Angeles               |
| Development of a connectomic functional brain imaging endophenotype of autism  | \$13,664 | Q2.Other                 | University of Cambridge                             |
| Excitatory/Inhibitory Imbalance in Autism and Early-course Schizophrenia   | \$14,931 | Q2.L.B                   | Connecticut Mental Health Center<br>Yale University |
| Sequence-based discovery of genes with pleiotropic effects across diagnostic boundaries and throughout the lifespan  | \$14,998 | Q3.L.B                   | Massachusetts General Hospital                      |
| α-Actinin Regulates Postsynaptic AMPAR Targeting by Anchoring PSD-95   | \$15,000 | Q2.Other                 | University of California, Davis                     |
| High-throughput Screening of Novel Trinucleotide Repeat Expansion in Autism Spectrum Disorders   | \$15,000 | Q3.L.B                   | The Hospital for Sick Children                      |
| Rebuilding Inhibition in the Autistic Brain  | \$24,840 | Q4.S.B                   | Brandeis University                                 |
| The Interplay Between Human Astrocytes and Neurons in Psychiatric Disorders  | \$25,000 | Q2.Other                 | University of California, San Diego                 |
| Investigations of a Proposed Molecular Feedback Loop in Cortical Neurons in Psychiatric Pathogenesis   | \$25,000 | Q4.S.B                   | University of California, San Francisco             |
| Dissecting the Human Magnocellular Visual Pathway in Perceptual Disorders  | \$28,000 | Q2.Other                 | New York University                                 |
| Autism Linked LRRTM4-Heparan Sulphate Proteoglycan Complex Functions in Synapse Development  | \$29,479 | Q2.S.G                   | University of British Columbia                      |
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| Engagement of Social Cognitive Networks during Game Play in Autism   | \$29,933 | Q2.Other                 | Duke University                               |
| A Massively Parallel Approach to Functional Testing of PTEN Mutations  | \$29,980 | Q2.S.G                   | OREGON HEALTH & SCIENCE UNIVERSITY            |
| Identifying Patterns of Genetic Variants Conferring Risk for Neurodevelopmental Disorders  | \$29,987 | Q3.L.B                   | Pennsylvania State University                 |
| Corticogenesis and Autism Spectrum Disorders: New Hypotheses on Transcriptional Regulation of Embryonic Neurogenesis by FGFs from In Vivo Studies and RNA-sequencing Analysis of Mouse Brain | \$29,993 | Q2.Other                 | Yale University                               |
| Brain Connectivity Changes in Autism as a Function of Motor Training: A Pilot Study  | \$29,999 | Q4.S.F                   | University of Wisconsin                       |
| Reconceptualizing Brain Connectivity and Development in Autism   | \$30,000 | Q2.Other                 | University of Miami                           |
| Signaling Pathways that Regulate Excitatory-inhibitory Balance   | \$30,000 | Q2.Other                 | University of California, San Diego           |
| Neural Basis of Deficits in Multisensory Integration in Schizophrenia and ASD  | \$30,000 | Q2.Other                 | Columbia University                           |
| Dissecting Reciprocal CNVs Associated With Autism  | \$30,000 | Q2.Other                 | Duke University                               |
| Developmental in Axons underlie Neuropsychiatric Illness   | \$30,000 | Q2.Other                 | Children's Research Institute (CRI)           |
| A Role for Cytoplasmic Rbfox1/A2BP1 in Autism  | \$30,000 | Q2.Other                 | University of California, Los Angeles         |
| Perturbation of Excitatory Synapse Formation in Autism Spectrum Disorders  | \$30,000 | Q2.Other                 | Max Planck Florida Institute for Neuroscience |
| Regulation of Interneuron Development in the Cortex and Basal Ganglia by Coup-TF2  | \$30,000 | Q2.Other                 | University of California, San Francisco       |
| Investigating the Role of RBFOX1 in Autism Etiology  | \$30,000 | Q2.Other                 | University of Miami                           |
| Interrogating Synaptic Transmission in Human Neurons   | \$30,000 | Q2.Other                 | Stanford University                           |
| Activity-dependent Mechanisms of Visual Circuit Formation  | \$30,000 | Q2.Other                 | Children's Research Institute (CRI)           |
| Antigenic Specificity and Neurological Effects of Monoclonal Anti-brain Antibodies Isolated from Mothers of a Child with Autism Spectrum Disorder: Toward Protection Studies                 | \$30,000 | Q2.S.A                   | The Feinstein Institute for Medical Research  |
| Behavioral, Cognitive, and Neural Signatures of Autism in Girls: Towards Big Data Science in Psychiatry  | \$30,000 | Q2.S.B                   | Stanford University                           |
| Understanding the Genetic Architecture of Rett Syndrome - an Autism Spectrum Disorder  | \$30,000 | Q2.S.D                   | Cold Spring Harbor Laboratory                 |
| Modeling Microglial Involvement in Autism Spectrum Disorders, with Human Neuro-glial Co-cultures   | \$30,000 | Q2.S.D                   | Whitehead Institute for Biomedical Research   |
| Identification and Functional Analysis of Risk Genes for Autistic Macrocephaly   | \$30,000 | Q2.S.G                   | King's College London                         |

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| Genotype to Phenotype Association in Autism Spectrum Disorders  | \$30,000 | Q2.S.G                   | Massachusetts General Hospital                               |
| Evaluating the Functional Impact of Epigenetic Control Related Genes Mutated in both Schizophrenia and Autism                             | \$30,000 | Q3.S.J                   | Columbia University  |
| Epigenetic Regulation of Gene Expression and DNA Methylation Associated with Autism Spectrum Disorders                                    | \$30,000 | Q3.S.J                   | Johns Hopkins University                                     |
| Cellular and Synaptic Dissection of the Neuronal Circuits of Social and Autistic Behavior   | \$30,000 | Q3.S.K                   | University of Coimbra  |
| Novel Proteomics Approach to Oxidative Posttranslational Modifications Underlying Anxiety and Autism Spectrum Disorders                   | \$32,930 | Q3.S.E                   | SANFORD-BURNHAM MEDICAL RESEARCH INSTIT                      |
| Dysregulated Translation and Synaptic Dysfunction in Medium Spiny Neurons of Autism Model Mice  | \$33,333 | Q2.Other                 | New York University  |
| Brain-behavior interactions and visuospatial expertise in autism: a window into the neural basis of autistic cognition                    | \$44,400 | Q2.Other                 | Hospital Riviere-des-Praires, University of Montreal, Canada |
| The PI3K Catalytic Subunit p110delta as Biomarker and Therapeutic Target in Autism and Schizophrenia                                      | \$45,000 | Q2.Other                 | Cincinnati Children's Hospital                               |
| A Novel GABA Signalling Pathway in the CNS  | \$50,000 | Q2.Other                 | McLean Hospital  |
| Integrative Regulatory Network Analysis of iPSCs Derived Neuronal Progenitors from Macrocephalic ASD Individuals in a Family-based Design | \$60,000 | Q2.Other                 | Yale University  |
| A Novel Glial Specific Isoform of Cdkl5: Implications for the Pathology of Autism in Rett Syndrome  | \$60,000 | Q2.S.D                   | University of Nebraska                                       |

